

**Marine  
Environmental  
Support  
Office**



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**PROPOSED SUPERFUND REFORM ACT OF 1994**

Due to extensive criticism against the effectiveness of the existing statute and a 1995 expiration deadline, the 103rd Congress and the Clinton administration have undertaken a major revision of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Referred to as the Superfund Reform Act of 1994, HR 3800 and S 1834 have been the primary tools for reconstructing the superfund law.

HR 3800 was adopted by the House Energy and Commerce Subcommittee on Transportation and Hazardous Materials and the Committee on Energy and Commerce in May of 1994. On June 14, 1994, the Senate Environment and Public Works Subcommittee on Superfund, Recycling, and Solid Waste Management approved moving S 1834 out of subcommittee for consideration by the full Senate Environment and Public Works Committee.

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These two bills, HR 3800 and S 1834, intend to address the following:

- Improve EPA's ability to gather information, respond to emergencies, and perform removal actions;
- Sharply limit the application and use of strict, joint, and several liability specifically as it applies to *de minimis* parties and those who settle with the government in accordance with a new liability allocation system;
- Create an allocation system to apportion liability among Potentially Responsible Parties (PRPs) based on the volume and toxicity of a PRP's wastes and the degree of care exhibited by the PRP in the management of those wastes;
- Limit the liability of municipalities and of lenders who acquire contaminated properties;
- Create more flexibility within the remedy selection process while also establishing national acceptable risk standards expressed as numerical concentration levels;
- Increase opportunities for public participation in the decision-making process and incorporate environmental justice concerns within the CERCLA process;
- Encourage the voluntary cleanup of contaminated sites through state programs thereby avoiding the need for listing on the National Priorities List;
- Allow states to seek, through contracts and cooperative agreements with the EPA, delegation of remedy selection and enforcement authorities;
- Create a fund and claim resolution procedure for the insured to collect eligible response costs from their insurers;
- Establish minimum standards for performance of Phase I Environmental Site Assessments and standards for organizations certifying environmental professionals.

The proposed bills would enhance government enforcement and authority by increasing individual removal actions conducted by the EPA to a 2-year duration cleanup with a budget limitation of \$4 million per site. This is twice as much time and money as the original limitation found in Section 104(c)1 of CERCLA (42 USC 9604). In addition, proposed amendments to Section 105, called for in HR 3800, direct states to assist the EPA by generating lists of facilities in the state that are "believed to present a current or potential hazard to human health and the environment" due to the release of hazardous substances, contaminants or pollutants.

In order to limit municipal liability, HR 3800 would cap the amount of liability to municipal solid waste generators at any given site at 10 percent. This would help eliminate municipalities being drawn into superfund litigation through contribution lawsuits where their wastes have been commingled with other hazardous substances at industrial landfills or dumps.



Remedy selection has also been targeted for change under the two bills. Under the existing superfund program, two separate processes are established to meet one goal. First, cleanup goals are selected based on risk to human health, the environment, and or specified state or federal cleanup standards. Next, a proposed remedial approach to meet cleanup standards is selected following establishment of cleanup levels. The proposed legislation calls for EPA to establish "national risk goals" and "national risk protocols" to create single numerical risk levels for chemical carcinogens and non-carcinogens for the former and to standardize formulae and methodology for the latter. The EPA would also be required to set "protective concentration levels" to standardize the 100 most common contaminants found at superfund sites.

The amendments also recognize that voluntary as opposed to government mandated cleanups are preferable in terms of cost, efficiency and speed. HR 3800 calls for the EPA to establish a program to provide technical, financial, and other assistance, including grants, to states to establish and expand voluntary response programs. This would provide opportunities for public participation in selecting response actions, stream-lined procedures, and some degree of government oversight to ensure that cleanups are protective of human health and the environment. Although these types of changes are significant, most of the controversy surrounding the existing law focuses on the impact of joint and several liability on small businesses and on those parties responsible for relatively small quantities of hazardous substances at a site. The proposed bills would attempt to address these concerns by creating an exemption from liability for those who are responsible for 55 gallons of liquid or less, or less than 100 pounds of solids at a site.

--*Environment Reporter*, Vol. 25, No. 13, July 29, 1994, p. 608.

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## **CONGRESS URGED TO AVOID ADOPTING RUNOFF CONTROLS UNDER CWA**

During the congressional hearing held June 28, a Natural Resources Defense Council attorney, Sarah Chasis, stated that Congress should avoid adopting measures under the Clean Water Act (CWA) to control polluted runoff because such provisions could undermine programs already established under the Coastal Zone Management Act (CZMA). The senior attorney further stated that uncertainties surrounding the CWA rewrite could impinge and delay implementation of controls on polluted runoff under the coastal zone law. Congressional committees weighing CWA reauthorization measures are considering whether to match the non-point source compliance deadlines under the statutes.



A NOAA official told the House Merchant Marine and Fisheries Subcommittee on Oceanography, Gulf of Mexico, and the Outer Continental Shelf, that state compliance with CWA controls on non-point sources should not substitute for compliance with CZMA requirements. These requirements were designed to encourage states to regulate land and water uses that affect their coastal zones. The Coastal Zone Act Reauthorization Amendments Act of 1990 established deadlines for implementation of non-point source pollution control programs in coastal states. States which fail to meet deadlines starting in 1995 for development and implementation of such programs risk losing a percentage of non-point source pollution control grants provided under the water act.

Stronger controls have been supported by the EPA. Robert Wayland, director of the EPA Office of Wetlands, Oceans, and Watersheds, testified that his agency would work with Congress to eliminate duplication between the CZMA program and revised non-point source pollution control programs under the CWA. Wayland suggested that coordination between the two programs could be addressed through the CZMA, rather than through amendments to the CWA. Both the EPA and NOAA will share responsibility for the CZMA program.

--*Environment Reporter*, Vol. 25, No. 10, July 8, 1994, p. 472.

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## **NEW EPA RULE ADDRESSES WAIVERS FROM SECONDARY TREATMENT REQUIREMENTS**

According to a final rule issued on August 9 by the Environmental Protection Agency, certain publicly owned treatment works (POTWs) can obtain waivers from secondary treatment requirements. The treatment plant can only obtain a waiver if they are able to show that such a level of treatment is not needed to protect the marine environment.

Apparently, the rule responds to 1987 amendments to Section 301(h) of the Clean Water Act. According to the notice, such areas include those where "deeper waters with large tides and currents can allow for greater dilution and dispersion than discharges into fresh waters."

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Prior to the 1987 amendments, publicly owned treatment works could seek a waiver from even primary treatment requirements if they showed that the discharges into deep marine waters did not harm the environment. According to the EPA's final rule, the 1987 amendments specified that:

- The discharge of pollutants cannot interfere with the attainment or maintenance of water quality;
- The scope of required monitoring is limited only to those scientific investigations necessary to study the effects of the proposed discharge;
- POTWs serving communities with populations of 50,000 or more, with industrial sources of toxic pollution, must implement an urban area pretreatment program; and
- POTWs discharging into environmentally "stressed" estuaries are not eligible for a waiver.

According to John Lishman, chief of Marine Pollution Control Branch of EPA's Water Office, the POTWs affected by the rule applied for waivers by Dec. 29, 1982. He also commented that more than 50% of the affected treatment works already have obtained waivers, while the remaining applications are still pending. More information can be obtained from Virginia Fox-Norse, Ocean and Coastal Protection Division, EPA, 401 M St. S. W., Washington, D. C. 20460; telephone (202) 260-8448

--*Environment Reporter*, Vol. 25, No. 15, August 12, 1994, p. 707.

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### **SOME BIOACCUMULATION TESTS NOT NEEDED, EPA SAYS**

The EPA announced on May 13, that ocean disposal of dredged material may not need to be tested in the suspended solid phase for bioaccumulation of toxics within aquatic organisms. EPA stated that it would issue an interim final rule to go into effect immediately and an identical proposed rule to gather comment on the clarification of ocean dumping regulations. The clarification of testing requirements is intended to help speed up dredging in the New York and New Jersey Harbor. The action in the two rule-makings that clarifies the testing requirements was included in a dredged material action plan developed by the EPA and the Army Corp of Engineers on April 8.

--*Environment Reporter*, Vol. 25, No. 3, May 20, 1994, p. 137.

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## EPA ADOPTS "WET" CONTROL POLICY

The EPA has adopted the Whole Effluent Toxicity (WET) Control Policy in an attempt to be consistent and treat all dischargers the same with respect to WET permit limitations. The policy was issued on July 22, 1994 (59 FR 37494). The WET policy defines major dischargers on the basis of a combination of factors, including size, toxic pollutant potential and stream flow volume.

Under the new policy, authorities will impose effluent limitations to control WET on all dischargers who have the reasonable potential to exceed WET water quality criteria. The following factors will be considered in establishing reasonable potential:

- Industry type (primary, secondary);
- Raw materials used;
- Products produced;
- Best management practices used;
- Control equipment;
- Treatment efficiencies;
- Publicly-owned treatment works type;
- Existing chemical monitoring data;
- Available in-stream survey data;
- Receiving water type and use designation; and
- Available dilution information.

The policy also establishes two independent mixing zones for controlling acute and chronic WET. The acute mixing zone immediately surrounds the discharge outfall and is normally sized to prevent lethality to passing organisms. The chronic mixing zone surrounds the acute mixing zone and is sized to protect the ecology of the water body as a whole from all point source-related stresses. Dischargers will be required to comply with effluent limitations to meet water quality criteria for acute toxicity at the edge of the acute mixing zone, and water quality criteria for chronic toxicity at the edge of the outer mixing zone.

--*Air & Water Pollution Control*, Vol. 7, No. 18, August 31, 1994, p. 5.

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## EPA PROPOSES STRATEGY TO CONTROL SEDIMENT RISKS

The EPA has proposed an internal strategy that seeks to coordinate agency efforts to control the risks associated with contaminated sediments according to a Notice of Availability and Request for Comment (59 FR 44880) issued on August 30.



The 140-page internal strategy is designed to:

- Prevent further sediment contamination that may cause unacceptable ecological or human health risks;
- Clean up existing sediment contamination that has significant human health and environmental effects;
- Ensure that sediment dredging and dredge spoil disposal operations are managed in an environmentally sound manner; and
- Develop consistent methods for assessing contaminated sediments.

The plan describes the steps that the EPA plans to take to develop a national inventory of sites and sources of sediment contamination. The EPA also proposes the use of acute toxicity tests to support registration of chemicals that accumulate in sediments under the Federal Insecticide, Fungicide and Rodenticide Act and the Toxic Substances Control Act. Other proposed actions include developing effluent guidelines for industries that discharge significant amounts of sediment contaminants and using pollution prevention policies to reduce or eliminate sediment contamination resulting from permit non-compliance.

Copies of the proposal (EPA 823-R-94-001) may be obtained from: Environmental Protection Agency, National Center for Environmental Publications, 11029 Kenwood Road, Building 5, Cincinnati, OH 45242; telephone (513) 891-6561, FAX (513) 891-6685. Comments should be submitted within 60 days to: Contaminated Sediment Strategy Comment Clerk, Water Docket MC-4101, Room L102, EPA, 401 M Street SW, Washington, D.C. 20460.

To obtain more information, contact: Thomas Armitage, Risk Assessment and Management Branch, EPA Office of Science and Technology, Mail Code 4305, 401 M Street SW, Washington, D.C. 20460; telephone (202) 260-7049.

--*Environment Reporter*, Vol. 25, No. 18, September 2, 1994, pp. 835-836.

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## **BILL ON RISK ASSESSMENTS APPROVED BY HOUSE PANEL**

The House Committee on Science, Space, and Technology approved legislation July 20 that would codify the EPA's risk assessment guidelines and allow them to be subject for judicial review. Introduced on April 28, the bill requires the EPA to establish the following:



- An office to coordinate health risk assessments;
- A pilot program to rank and compare risks of environmental hazards;
- The president's science advisor to ensure government agencies use comparable risk assessment methods;
- An appointed director of risk assessment activities;
- A specified process for developing guidelines, including provisions for their peer review; and
- An identification of 10 research issues judged to be in the highest risk category.

In addition, the bill also calls for the National Academy of Sciences to study comparative risk analysis methods.

--*Environment Reporter*, Vol. 25, No. 13, July 29, 1994, p. 604.

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## **INDUSTRIES TO PARTICIPATE IN NEW APPROACH TO ENVIRONMENTAL REGULATION**

Carol Browner, EPA's Administrator announced on July 20 a fundamentally different system for protecting the environment which will be tried on six industrial groups. Dubbed the Common Sense Initiative this system would replace the pollutant-by-pollutant approach of the past with an industry-by-industry method of the future. Participants in the initiative include automobile manufacturing, computers and electronics, iron and steel, metal finishing and plating, petroleum refining, and printing industries. For each of the industry sectors under the initiative, an advisory team would be formed which will include EPA assistant administrators and representatives from industry, environmental groups, and state and local governments. Labor unions, environmental justice groups, and other federal agencies also would participate.

The teams are to examine every aspect of environmental regulation as it affects an industry and the environment. These teams will identify opportunities of greater reductions in pollution through flexible, innovative environmental protection strategies. The agency will then examine existing law to determine whether legislative changes might be necessary to implement the new approach. According to Browner, most changes can be achieved administratively. Manik Roy, a pollution prevention specialist with the Environmental Defense Fund, praised the initiative stating that it provides an opportunity to make pollution prevention a standard business.

--*Environment Reporter*, Vol. 25, No. 12, July 22, 1994, pp. 525-526.

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## NTC SAN DIEGO CLEAN UP

The Navy started its \$250 million dollar, five-year environmental cleanup of San Diego Naval Training Center with a \$282,000 contract to remove polluted soil. In addition, \$1.38 million was allocated for cleanups at the Naval Air Facility, El Centro. These contracts are the first to follow the original \$520 million for environmental studies launched in May of 1989 at 38 Navy and Marine Corps bases in Southern California, Arizona, and New Mexico.

According to Lee Saunders, spokesman for the environmental department of the Southwest Division Naval Facilities Engineering Command, the contracts recently issued at NTC signify that the navy has "moved from the study phase to the actual cleanup phase."

Although the 456-acre Naval Training Center is considered one of the least-polluted military bases in the region, there is some concern that gasoline and other contaminants which leaked from underground storage tanks may seep into San Diego Bay and endanger marine life.

The El Centro Naval Air Facility will undergo a \$900,000 contracted cleanup which entails the removal of several underground storage tanks and the cleaning of contaminated soil.

--*The San Diego Union-Tribune*, Sunday, August 7, 1994, p. B-1.

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## UPGRADE OF WASTE FACILITY AT NAS MIRAMAR COULD DAMAGE AIR, WATER, WETLANDS

The EPA stated that a proposed upgrade of a waste disposal facility located on a portion of the Naval Air Station Miramar leased to San Diego could adversely affect air, water, wetlands, and biological resources.

The Navy's environmental impact statement also describes the consolidation and transfer of waste disposal equipment from other disposal sites. The EPA expressed concern and recommended that construction be restricted during peak air quality non-attainment periods. The EPA is concerned that the project will disturb vernal wetlands, those that develop in the winter but evaporate in the summer.

--*Environment Reporter*, Vol. 25, No. 12, July 22, 1994, p. 541.

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## **EPA PROPOSES \$1 MILLION FINE AGAINST COAST GUARD**

The EPA proposed a \$1 million penalty on the U.S. Coast Guard Support Center located in Kodiak, Alaska, for two major violations of the federal hazardous waste law. The EPA alleged that the Coast Guard did not properly monitor the ground water near an area where cleaning solvents had been dumped. The second violation occurred when the Coast Guard created two waste piles after burning housing demolition debris. The Coast Guard did not obtain a permit for the storage of hazardous waste created from the burning and did not follow proper procedure in operating and closing the waste piles. Currently, the debris and contaminated soils have been removed at a cost of \$1.1 million.

--*Environment Reporter*, Vol. 25, No. 12, July 22, 1994, p. 544.

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## **NAVY FINED FOR HAZARDOUS WASTE VIOLATIONS**

On July 21, the EPA announced that the U.S. Navy has agreed to pay a \$57,223 fine for violating federal hazardous waste management laws at its Naval Construction Battalion Center in Davisville, Rhode Island. EPA Officials commented that this is only the second settlement of an action against a federal facility under the Federal Facility Compliance Act of 1992. According to the EPA, the Navy did not maintain training records for base personnel involved in the handling of hazardous waste. In addition, the EPA claims that the Navy failed to properly identify wastes prior to disposal and did not properly label waste containers. Some of the hazardous wastes identified at the Naval Construction Battalion Center were paints, sulfuric acid, antifreeze, crank case oil, and solvents.

--*Environment Reporter*, Vol. 25, No. 13, July 29, 1994, pp. 605-606.

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## **NAVY ESTABLISHES RESTORATION ADVISORY BOARD**

To increase public involvement with the Installation Restoration (IR) process, NAS North Island has established a Restoration Advisory Board (RAB). The board will serve as a forum for discussion and exchange of information related to ongoing environmental cleanup under the Navy's IR Program. The NAS North Island RAB will provide an opportunity for the community to review cleanup progress, provide input, and participate in a dialogue with decision makers. The RAB is being formed to bring together people who reflect the diverse interests within the local community and to enhance two-way

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flow of information and concerns between the community and the Navy. The RAB will allow the community to actively participate in the timely review of base cleanup plans and documents.

Currently a Technical Review Committee (TRC) focuses on technical review of the NAS North Island IR Program site documents and plans. The TRC has often been represented by only one community participant on issues of concern rather than the entire local community. The existing TRC will be transferred into the RAB essentially becoming the focal point for community involvement in all aspects of the NAS North Island IR Program.

The IR Program is addressing 12 areas of contaminated past disposal sites. The California Environmental Protection Agency Department of Toxic Substance Control is presently providing the IR Program regulatory oversight to ensure proper compliance processes. Current industrial waste disposal operations comply with the Resource Conservation and Recovery Act (RCRA) Corrective Action Program and all other applicable federal, state, and local laws and regulations.

--Environmental Health Coalition, *North Island Fact Sheet No. 3*, June 1994.

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## **COAST GUARD TO ISSUE "TICKETS" FOR SMALL OIL SPILLS**

The United States Coast Guard has launched a pilot program in which citations comparable to tickets issued by police for motoring offenses will be issued for oil spills of less than 100 gallons and other non-criminal violations of anti-pollution rules. The new program is being tested for six months in the port areas of Charleston, Galveston, and Long Beach.

--*Marine Pollution Bulletin*, Vol. 28, No. 6, June 1994, p. 345.

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## **NEW ENVIRONMENTAL BULLETIN BOARD SERVICES AVAILABLE**

The Army Corps of Engineers Waterways Experiment Station has announced that two new electronic bulletin board services have recently gone on-line. The Water Quality Bulletin Board System (WQBBS) and the Natural Resources Bulletin Board Service (NRRP/NRTS BBS) were conceived to enhance communications among personnel involved in water quality and natural resources/recreation activities. These



bulletin board services give users access to the abundance of information available through the Army Corps of Engineers' research and technical support programs and personnel. The WQBBS can be reached at (601) 634-4216 (8 Data Bits, No Parity, 1 Stop Bit), and the NRRP/NRTS BBS can be reached at (601) 634-2683 (8,N,1).

For more information about the Water Quality Bulletin Board System, contact Carolyn Schneider at (601) 634-3657, or Bob Gunkel at (601) 634-3722. For information about the Natural Resources Bulletin Board System, call Russ Tillman at (601) 634-4201.

--*Environmental Executive Notes*, Waterways Experiment Station, August 1994.

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## STATE REGULATORY DEVELOPMENTS

### California Water Quality Standards Overturned

In a March 23 decision, the California Superior Court for Sacramento County struck down the California Inland Surface Waters Plan and the California Enclosed Bays and Estuaries Plan adopted by the State Water Resources Control Board. The court found that the water board did not comply with procedural requirements outlined by the Administrative Procedures Act (APA), violated the California Environmental Quality Act (CEQA) by not issuing an environmental impact report, and did not adequately consider the economic ramifications of the plans as required by the Porter-Cologne Act. The ruling temporarily leaves the state without a minimum set of toxics standards, and requires the board to consider "on a more general basis information reasonably available to it unless evidence of beneficial uses and environmental characteristics of individual hydrographic units is presented to suggest that certain hydrographic units should be treated differently."

The nine California regional boards are working with the EPA to revise the state's basin plan. While the court's decision requires the state to consider economic factors in setting standards, the Clean Water Act only addresses economics at the time of designating beneficial uses, setting up a state-federal conflict, according to Maria Rea, Chief of Water Quality Standards for EPA Region IX. The decision will affect dischargers who apply for new or renewed permits, Rea said, but they cannot be used as a basis for setting discharge limits. The EPA expects to propose regulations by November.

--*California Environment Reporter*, Vol. 4, No. 11, April 8, 1994, pp. 213-214.

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## **New Jersey Adopts Coastal Development Permit Rules**

On June 28, New Jersey environmental regulators announced the adoption of final regulations that make all development in the state's coastal areas subject to a tiered system of review based on proximity to the water, beaches, and dunes. The rules implement amendments to New Jersey's Coastal Area Facilities Review Act enacted in 1993. The new rules will take effect June 19 and will eliminate permit exemptions for residential projects of fewer than 25 units, industrial facilities, and small commercial developments.

--*Environment Reporter*, Vol. 25, No. 11, July 15, 1994, p. 514.

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## **NEW DOCUMENTS AVAILABLE FROM MESO**

### **X-Ray Fluorescence Spectrometry for Field Analysis of Marine Sediments**

Since heavy metals are among the more toxic pollutants in the environment, metal contamination in soils and sediments is an important environmental concern. Rapid, simultaneous, multi-element analysis can be performed using X-ray fluorescence (XRF) spectrometry. XRF spectrometry is capable of analyzing a wide range of elements, and has a dynamic range from parts per million (ppm) to 100 percent, encompassing typical element levels in soils. The technique is economically attractive, and generates no hazardous wastes. Since the technique is nondestructive, key samples can be reanalyzed or measured by a different method for confirmation purposes. Until recently, most XRF instruments were large, heavy units requiring significant floor or bench space in a laboratory, and samples had to be collected in the field and returned to the lab for analysis. Truly field-portable instruments are now becoming commercially available, making them an increasingly important tool for the *in situ* analysis of metals.

NRaD evaluated the use of one such instrument aboard the *RV ECOS* to (1) explore the variation of replicate wet samples from the same sediment grab, (2) compare the analysis of natural wet samples with dried, homogenized samples, and (3) demonstrate the feasibility of obtaining very rapid analyses on site. XRF spectrometry was shown to provide precise and rapid measurements at detection levels relevant to concentrations indicative of pollution for a wide range of metals. The investigation demonstrated that the XRF spectrometer can be used to rapidly screen for metal contamination with a minimum of sample handling and preparation. A field-portable unit performed well onboard survey vessels and generated data within a time frame that could guide on-site decision-making for mapping strategies and detailed sampling.



## NEPSS Specialty Offices

The Naval Environmental Protection Support Service (NEPSS) consists of four Specialty Offices, in various commands, tasked to provide environmental engineering, research, regulatory assistance, data management, and information exchange services for the Navy. The typical Navy facility requires technology to control pollution from a variety of sources. The Specialty Offices of the Naval Environmental Support Service, of which MESO is one, provide unique technical assistance for aircraft operation, ordnance-related pollution and shipboard and marine environmental quality. These Offices also provide information to assist the Naval facilities in their compliance with environmental law and regulations.

## QwikLite Bioassay System (New Version)

This brochure describes an improved version of a bioassay developed by NRaD scientists that determines acute response and chronic effects of a wide variety of toxicants upon bioluminescent dinoflagellates by measuring their light output after exposure. Successful bioassays of this type have been performed on two species, *Gonyaulax polyedra* and *Pyrocystis lunula*.

### ABOUT THE MARINE ENVIRONMENTAL UPDATE

This newsletter is produced by the Marine Environmental Support Office (MESO) and is dedicated specifically to inform the Navy about marine environmental issues that may influence how the Navy conducts its operations. MESO is located at the Naval Command, Control and Ocean Surveillance Center's Research, Development, Test and Evaluation Division (NRaD) in San Diego, California. The mission of MESO is to provide Navy-wide technical and scientific support on marine environmental science, protection and compliance issues. This support covers a broad spectrum of activities, including routine requests for data and information, technical review and consultation, laboratory and field studies, comprehensive environmental assessments, and technology transfer. Significant developments in marine law, policy, and scientific advancements will be included in the newsletter, along with references and points of contact for further information. The Marine Environmental Support Office may be reached at:

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